

# ADDITIONAL NOTES ON THE GENUS CARYOPTERIS (VERBENACEAE). I

Harold N. Moldenke

## CARYOPTERIS Bunge

Additional & emended bibliography: Iwasuki, Honzo-zufu, ed. 1, 20: fol. 14 recto. 1838; Itôma, Somoku-Dzusetsu, ed. 1, 11: pl. 40. 1861; Hance, Journ. Linn. Soc. Lond. Bot. 8: 144. 1885; Henriq., Bol. Soc. Brot. 3: 144. 1885; Diels, Engl. Bot. Jahrb. 29: 550. 1900; Van., Bull. Acad. Geogr. Bot. 14: 171—172. 1904; C. K. Schneid., Illust. Handb. Laubholz. 2: pl. 382, fig. m—o. 1911; Dunn, Notes Roy. Bot. Gard. Edinb. 8: 154. 1913; Makino, Somoku-Dzusetsu, ed. 3, 4: pl. 38. 1913; Matsum., Bot. Mag. Tokyo 27: 274. 1913; W. W. Sm., Notes Roy. Bot. Gard. Edinb. 10: 18—19. 1917; Shirai & Okumura, Honzo-zufu, ed. 2, 20: fol. 14, 1916—21; Breslau, Feddes Repert. Spec. Nov. Beih. 12: 475. 1922; Chung, Mem. Sci. Soc. China 1 (1): 228—229. 1924; Rehd., Journ. Arnold Arb. 15: 326. 1934; Mold., Phytologia 52: 415—437. 1983.

## CARYOPTERIS CHOSENENSIS Mold.

Additional & emended bibliography: Iwasuki, Honzo-zufu, ed. 1, 20: fol. 14 recto. 1838; Itôma, Somoku-Dzusetsu, ed. 1, 11: pl. 40. 1861; Makino, Somoku-Dzusetsu, ed. 3, 4: pl. 38. 1913; Shirai & Okumura, Honzo-zufu, ed. 2, 20: fol. 14 recto. 1916—21; W. W. Sm., Notes Roy. Bot. Gard. Edinb. 10: 18. 1917; Mold., Phytologia 52: 428, 430, 433, & 434. 1983.

Additional & emended illustrations: Iwasuki, Honzo-zufu, ed. 1, 20: fol. 14 recto. 1838; Itôma, Somoku-Dzusetsu, ed. 1, 11: pl. 40. 1861; Makino, Somoku-Dzusetsu, ed. 3, 4: pl. 38. 1913; Shirai & Okumura, Honzo-zufu, ed. 2, 20: fol. 14 recto (in color). 1916—21.

Continued description: Corolla-lobes 4 small and obovate, 4—5 mm. long, the 5th larger, subcordate, reflexed, slightly longer than the tube; stamens 4, didymous, 3—3.5 cm. long, long-exserted, arcuately incurved; filaments 3—3.5 cm. long, basally slightly puberulous or pubescent; anther thecae horizontally divaricate; pollen grains triporate, oblate spheroidal or subprolate; style 3—3.5 cm. long or longer, long-exserted, usually equaling the stamens, apically bifid, the stigmatic branches rather long and acuminate; ovary obscurely 4-lobed, apiculate, externally glabrous or glandular-pubescent; fruiting-calyx 5—6 mm. long; fruit about 7.5 mm. wide, externally glandular-pubescent, on maturity splitting into 4 pyrenes; nutlets 4, obovoid, 4—4.5 mm. long, externally net-veined and glandular-punctate, very similar to those seen in the Lamiaceae.

This species is based on an unnumbered Siebold collection from somewhere in Japan, deposited in the Munich herbarium. The original description reads: "Cl. ramis tetragonis glabris, foliis inferioribus petiolatis e basi rotundata ovatis superioribus subsessilibus basi attenuatis lanceolatis, omnibus acutis grosse serrato-